

SEQUENCE LISTING

<110> KIRST, Susan
SHARP, John
HOLTZMAN, Douglas
BARNES, Tom
FRASER, Christopher

<120> Novel Genes Encoding Proteins Having Diagnostic,
Preventive, Therapeutic, and Other Uses

<130> 210147.0025/11U1

<140> Not Yet Assigned

<141> 2000-06-16

<150> US 09/342,364

<151> 1999-06-29

<160> 100

<170> PatentIn Ver. 2.1

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Leu His Gly Leu Ser Ala Thr His Leu Leu Thr Leu Asp Leu Ser Ser
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Asn Arg Leu Gly His Ile Ser Val Pro Glu Leu Ala Ala Leu Pro Ala
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Phe Leu Lys Asn Gly Leu Tyr Leu His Asn Asn Pro Leu Pro Cys Asp
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Cys Arg Leu Tyr His Leu Leu Gln Arg Trp His Gln Arg Gly Leu Ser
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Ala Val Arg Asp Phe Ala Arg Glu Tyr Val Cys Leu Ala Phe Lys Val
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Cys Ser Ser Ala Pro Ala Leu Gly Leu Lys Arg Pro Glu Glu His Leu
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Tyr Ala Leu Val Gly Arg Ser Leu Arg Leu Tyr Cys Asn Thr Ser Val
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Leu Ala Thr Gly Pro Arg Leu His His Asn Gln Thr His Glu Tyr Asn
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Val Ser Val His Phe Pro Arg Pro Glu Pro Glu Ala Phe Asn Thr Gly
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Phe Gln Leu Arg Ala Leu His Leu Asp His Asn Glu Leu Asp Ala Leu
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His Ile Ser Val Pro Glu Leu Ala Ala Leu Pro Ala Phe Leu Lys Asn
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Gly Leu Tyr Leu His Asn Asn Pro Leu Pro Cys Asp Cys Arg Leu Tyr
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Phe Ala Arg Glu Tyr Val Cys Leu Ala Phe Lys Val Pro Ala Ser Arg
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Leu Gln Ala Val Gly Met Phe Leu Gly Glu Phe Ser Cys Leu Ala Ala
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Phe Tyr Leu Leu Arg Cys Arg Ala Ala Gly Gln Ser Asp Ser Ser Val
65 70 75 80

Asp Pro Gln Gln Pro Phe Asn Pro Leu Leu Phe Leu Pro Pro Ala Leu
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Cys Asp Met Thr Gly Thr Ser Leu Met Tyr Val Ala Leu Asn Met Thr
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Ser Ala Ser Ser Phe Gln Met Leu Arg Gly Ala Val Ile Ile Phe Thr
115 120 125

Gly Leu Phe Ser Val Ala Phe Leu Gly Arg Arg Leu Val Leu Ser Gln
130 135 140

Trp Leu Gly Ile Leu Ala Thr Ile Ala Gly Leu Val Val Val Gly Leu
145 150 155 160

Ala Asp Leu Leu Ser Lys His Asp Ser Gln His Lys Leu Ser Glu Val
165 170 175

Ile Thr Gly Asp Leu Leu Ile Ile Met Ala Gln Ile Ile Val Ala Ile
180 185 190

Gln Met Val Leu Glu Glu Lys Phe Val Tyr Lys His Asn Val His Pro
195 200 205

Leu Arg Ala Val Gly Thr Glu Gly Leu Phe Gly Phe Val Ile Leu Ser
210 215 220

Leu Leu Leu Val Pro Met Tyr Tyr Ile Pro Ala Gly Ser Phe Ser Gly
225 230 235 240

Asn Pro Arg Gly Thr Leu Glu Asp Ala Leu Asp Ala Phe Cys Gln Val
245 250 255

Gly Gln Gln Pro Leu Ile Ala Val Ala Leu Leu Gly Asn Ile Ser Ser
260 265 270

Ile Ala Phe Phe Asn Phe Ala Gly Ile Ser Val Thr Lys Glu Leu Ser
275 280 285

Ala Thr Thr Arg Met Val Leu Asp Ser Leu Arg Thr Val Val Ile Trp
290 295 300

Ala Leu Ser Leu Ala Leu Gly Trp Glu Ala Phe His Ala Leu Gln Ile
305 310 315 320

Leu Gly Phe Leu Ile Leu Leu Ile Gly Thr Ala Leu Tyr Asn Gly Leu
325 330 335

His Arg Pro Leu Leu Gly Arg Leu Ser Arg Gly Arg Pro Leu Ala Glu
340 345 350

Glu Ser Glu Gln Glu Arg Leu Leu Gly Gly Thr Arg Thr Pro Ile Asn
355 360 365

Asp Ala Ser
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<211> 18

<212> PRT

<213> Homo sapiens

<400> 12

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Thr Gly

<210> 13

<211> 353

<212> PRT

<213> Homo sapiens

<400> 13

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 35 40 45
 Leu Leu Arg Cys Arg Ala Ala Gly Gln Ser Asp Ser Ser Val Asp Pro
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 Gln Gln Pro Phe Asn Pro Leu Leu Phe Leu Pro Pro Ala Leu Cys Asp
 65 70 75 80
 Met Thr Gly Thr Ser Leu Met Tyr Val Ala Leu Asn Met Thr Ser Ala
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 Ser Ser Phe Gln Met Leu Arg Gly Ala Val Ile Ile Phe Thr Gly Leu
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 Phe Ser Val Ala Phe Leu Gly Arg Arg Leu Val Leu Ser Gln Trp Leu
 115 120 125
 Gly Ile Leu Ala Thr Ile Ala Gly Leu Val Val Val Gly Leu Ala Asp
 130 135 140
 Leu Leu Ser Lys His Asp Ser Gln His Lys Leu Ser Glu Val Ile Thr
 145 150 155 160
 Gly Asp Leu Leu Ile Ile Met Ala Gln Ile Ile Val Ala Ile Gln Met
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 Val Leu Glu Glu Lys Phe Val Tyr Lys His Asn Val His Pro Leu Arg
 180 185 190
 Ala Val Gly Thr Glu Gly Leu Phe Gly Phe Val Ile Leu Ser Leu Leu
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 Leu Val Pro Met Tyr Tyr Ile Pro Ala Gly Ser Phe Ser Gly Asn Pro
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 Arg Gly Thr Leu Glu Asp Ala Leu Asp Ala Phe Cys Gln Val Gly Gln
 225 230 235 240
 Gln Pro Leu Ile Ala Val Ala Leu Leu Gly Asn Ile Ser Ser Ile Ala
 245 250 255

Phe Phe Asn Phe Ala Gly Ile Ser Val Thr Lys Glu Leu Ser Ala Thr
260 265 270

Thr Arg Met Val Leu Asp Ser Leu Arg Thr Val Val Ile Trp Ala Leu
275 280 285

Ser Leu Ala Leu Gly Trp Glu Ala Phe His Ala Leu Gln Ile Leu Gly
290 295 300

Phe Leu Ile Leu Leu Ile Gly Thr Ala Leu Tyr Asn Gly Leu His Arg
305 310 315 320

Pro Leu Leu Gly Arg Leu Ser Arg Gly Arg Pro Leu Ala Glu Glu Ser
325 330 335

Glu Gln Glu Arg Leu Leu Gly Gly Thr Arg Thr Pro Ile Asn Asp Ala
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Ser

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<211> 29

<212> PRT

<213> Homo sapiens

<400> 14

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<212> PRT

<213> Homo sapiens

<400> 15

Asn Met Thr Ser Ala Ser Ser Phe Gln
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<210> 16

<211> 14

<212> PRT

<213> Homo sapiens

<400> 16

Asp Leu Leu Ser Lys His Asp Ser Gln His Lys Leu Ser Glu
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<210> 17

<211> 27

<212> PRT

<213> Homo sapiens

<400> 17

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1 5 10 15

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<212> PRT

<213> Homo sapiens

<400> 18

Glu Ala Phe His Ala Leu Gln
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<210> 19

<211> 21

<212> PRT

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1 5 10 15

Ala Phe Tyr Leu Leu
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<211> 21

<212> PRT

<213> Homo sapiens

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Met Tyr Val Ala Leu
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<210> 21

<211> 19

<212> PRT

<213> Homo sapiens

<400> 21

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Phe Leu Gly

<210> 22

<211> 17

<212> PRT

<213> Homo sapiens

<400> 22

Trp Leu Gly Ile Leu Ala Thr Ile Ala Gly Leu Val Val Val Gly Leu
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Ala

<210> 23

<211> 17

<212> PRT

<213> Homo sapiens

<400> 23

Val Ile Thr Gly Asp Leu Leu Ile Ile Met Ala Gln Ile Ile Val Ala
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Ile

<210> 24

<211> 18
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<400> 24
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Tyr Ile

<210> 25
<211> 23
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Asn Phe Ala Gly Ile Ser Val
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Ala Leu Gly Trp
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Leu

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<400> 28
Arg Cys Arg Ala Ala Gly Gln Ser Asp Ser Ser Val Asp Pro Gln Gln
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Pro Phe Asn Pro
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Arg Arg Leu Val Leu Ser Gln
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Leu Arg Ala Val Gly Thr Glu
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Thr Lys Glu Leu Ser Ala Thr Thr Arg
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<210> 32
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 32
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 Asp Ala Ser
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<210> 33
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 <212> DNA
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<211> 729

<212> DNA

<213> Homo sapiens

<400> 34

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<210> 35

<211> 243

<212> PRT

<213> Homo sapiens

<400> 35

Met Ala Pro His Trp Ala Val Trp Leu Leu Ala Ala Arg Leu Trp Gly
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Leu Gly Ile Gly Ala Glu Val Trp Trp Asn Leu Val Pro Arg Lys Thr
20 25 30

Val Ser Ser Gly Glu Leu Ala Thr Val Val Arg Arg Phe Ser Gln Thr
35 40 45

Gly Ile Gln Asp Phe Leu Thr Leu Thr Leu Thr Glu Pro Thr Gly Leu
50 55 60

Leu Tyr Val Gly Ala Arg Glu Ala Leu Phe Ala Phe Ser Met Glu Ala
65 70 75 80

Leu Glu Leu Gln Gly Ala Ile Ser Trp Glu Ala Pro Val Glu Lys Lys
85 90 95

Thr Glu Cys Ile Gln Lys Gly Lys Asn Asn Gln Thr Glu Cys Phe Asn
100 105 110

Phe Ile Arg Phe Leu Gln Pro Tyr Asn Ala Ser His Leu Tyr Val Cys
115 120 125

Gly Thr Tyr Ala Phe Gln Pro Lys Cys Thr Tyr Val Val Ser Ala Ala
130 135 140

Leu Leu Pro Arg Cys Pro Gln Pro Pro Ala Leu Leu Thr Leu Leu Trp
145 150 155 160

Thr Arg Gly Cys Gly Pro Gln Ser Pro Ala Leu Lys His Leu Leu Ile
165 170 175

Thr Ser Leu Ser Val Leu Arg Thr Cys Ser Pro Ser Leu Trp Ser Met
180 185 190

Glu Ser Leu Lys Met Gly Arg Ala Ser Val Pro Met Thr Gln Leu Arg
195 200 205

Ala Met Leu Ala Phe Leu Trp Met Val Ser Cys Thr Arg Pro His Ser
210 215 220

Thr Thr Ser Trp Ala Arg Asn Pro Leu Ser Cys Val Thr Trp Gly Pro
225 230 235 240

Thr Thr Pro

<210> 36

<211> 20

<212> PRT

<213> Homo sapiens

<400> 36

Met Ala Pro His Trp Ala Val Trp Leu Leu Ala Ala Arg Leu Trp Gly
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Leu Gly Ile Gly
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<210> 37

<211> 223

<212> PRT

<213> Homo sapiens

<400> 37

Ala Glu Val Trp Trp Asn Leu Val Pro Arg Lys Thr Val Ser Ser Gly
1 5 10 15

Glu Leu Ala Thr Val Val Arg Arg Phe Ser Gln Thr Gly Ile Gln Asp
20 25 30

Phe Leu Thr Leu Thr Leu Thr Glu Pro Thr Gly Leu Leu Tyr Val Gly
35 40 45

Ala Arg Glu Ala Leu Phe Ala Phe Ser Met Glu Ala Leu Glu Leu Gln
50 55 60

Gly Ala Ile Ser Trp Glu Ala Pro Val Glu Lys Lys Thr Glu Cys Ile
65 70 75 80

Gln Lys Gly Lys Asn Asn Gln Thr Glu Cys Phe Asn Phe Ile Arg Phe
85 90 95

Leu Gln Pro Tyr Asn Ala Ser His Leu Tyr Val Cys Gly Thr Tyr Ala
100 105 110

Phe Gln Pro Lys Cys Thr Tyr Val Val Ser Ala Ala Leu Leu Pro Arg
115 120 125

Cys Pro Gln Pro Pro Ala Leu Leu Thr Leu Leu Trp Thr Arg Gly Cys

130

135

140

Gly Pro Gln Ser Pro Ala Leu Lys His Leu Leu Ile Thr Ser Leu Ser
145 150 155 160

Val Leu Arg Thr Cys Ser Pro Ser Leu Trp Ser Met Glu Ser Leu Lys
165 170 175

Met Gly Arg Ala Ser Val Pro Met Thr Gln Leu Arg Ala Met Leu Ala
180 185 190

Phe Leu Trp Met Val Ser Cys Thr Arg Pro His Ser Thr Thr Ser Trp
195 200 205

Ala Arg Asn Pro Leu Ser Cys Val Thr Trp Gly Pro Thr Thr Pro
210 215 220

<210> 38

<211> 2498

<212> DNA

<213> Homo sapiens

<400> 38

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<210> 39

<211> 678

<212> DNA

<213> Homo sapiens

<400> 39

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<211> 226

<212> PRT

<213> Homo sapiens

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Glu Glu Val Phe Thr Ser Lys Glu Glu Ala Asn Phe Phe Ile His Arg
35 40 45

Arg Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn
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Leu Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg
65 70 75 80

Glu Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr
85 90 95

Ser Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile
100 105 110

Asp Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu
115 120 125

Val Ile Phe Gly Leu Leu Gly Tyr Tyr Leu Cys Ile Thr Lys Cys Asn
130 135 140

Arg Leu Gln His Pro Cys Ser Ser Ala Val Tyr Glu Arg Gly Arg His
145 150 155 160

Thr Pro Ser Ile Ile Phe Arg Arg Pro Glu Glu Ala Ala Leu Ser Pro
165 170 175

Leu Pro Pro Ser Val Glu Asp Ala Gly Leu Pro Ser Tyr Glu Gln Ala
180 185 190

Val Ala Leu Thr Arg Lys His Ser Val Ser Pro Pro Pro Pro Tyr Pro
195 200 205

Gly His Thr Lys Gly Phe Arg Val Phe Lys Lys Ser Met Ser Leu Pro
210 215 220

Ser His
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<210> 41

<211> 17

<212> PRT

<213> Homo sapiens

<400> 41

Met Phe Thr Leu Leu Val Leu Leu Ser Gln Leu Pro Thr Val Thr Leu
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Gly

<210> 42

<211> 209

<212> PRT

<213> Homo sapiens

<400> 42

Phe Pro His Cys Ala Arg Gly Pro Lys Ala Ser Lys His Ala Gly Glu
1 5 10 15

Glu Val Phe Thr Ser Lys Glu Glu Ala Asn Phe Phe Ile His Arg Arg
20 25 30

Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn Leu
35 40 45

Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg Glu
50 55 60

Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr Ser
65 70 75 80

Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile Asp
85 90 95

Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu Val
100 105 110

Ile Phe Gly Leu Leu Gly Tyr Tyr Leu Cys Ile Thr Lys Cys Asn Arg
115 120 125

Leu Gln His Pro Cys Ser Ser Ala Val Tyr Glu Arg Gly Arg His Thr
130 135 140

Pro Ser Ile Ile Phe Arg Arg Pro Glu Glu Ala Ala Leu Ser Pro Leu
145 150 155 160

Pro Pro Ser Val Glu Asp Ala Gly Leu Pro Ser Tyr Glu Gln Ala Val
165 170 175

Ala Leu Thr Arg Lys His Ser Val Ser Pro Pro Pro Pro Tyr Pro Gly
 180 185 190

His Thr Lys Gly Phe Arg Val Phe Lys Lys Ser Met Ser Leu Pro Ser
 195 200 205

His

<210> 43

<211> 96

<212> PRT

<213> Homo sapiens

<400> 43

Phe Pro His Cys Ala Arg Gly Pro Lys Ala Ser Lys His Ala Gly Glu
 1 5 10 15

Glu Val Phe Thr Ser Lys Glu Glu Ala Asn Phe Phe Ile His Arg Arg
 20 25 30

Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn Leu
 35 40 45

Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg Glu
 50 55 60

Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr Ser
 65 70 75 80

Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile Asp
 85 90 95

<210> 44

<211> 25

<212> PRT

<213> Homo sapiens

<400> 44

Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu Val
 1 5 10 15

Ile Phe Gly Leu Leu Gly Tyr Tyr Leu

20

25

<210> 45
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 45

Cys Ile Thr Lys Cys Asn Arg Leu Gln His Pro Cys Ser Ser Ala Val
 1 5 10 15

Tyr Glu Arg Gly Arg His Thr Pro Ser Ile Ile Phe Arg Arg Pro Glu
 20 25 30

Glu Ala Ala Leu Ser Pro Leu Pro Pro Ser Val Glu Asp Ala Gly Leu
 35 40 45

Pro Ser Tyr Glu Gln Ala Val Ala Leu Thr Arg Lys His Ser Val Ser
 50 55 60

Pro Pro Pro Pro Tyr Pro Gly His Thr Lys Gly Phe Arg Val Phe Lys
 65 70 75 80

Lys Ser Met Ser Leu Pro Ser His
 85

<210> 46
 <211> 2169
 <212> DNA
 <213> Homo sapiens

<400> 46

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 ccaagaacag ggatatgtgt ggattacagt tttctctgcc ttgcctacga ctgtttctgg 180
 ttgttacctg ttatctttta ttattactcc acaaagaaat acttgatgt tcgtctgttt 240
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 agaattttcc tgaaagtaca gtttttctgt atctgactgg gaataatata tcttatataa 360
 atgaaagtga attaacagga ctccattctc ttgttagcatt gtatttggat aattctaaca 420
 ttctgtatgt atatccaaaa gcctttgttc aattgaggca tctatatttt ctatttctaa 480
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 atttatattt acagtataat caggtatctt ttgttccgag aggagtattt aatgatctag 600
 tttcagttca gtacttaaat ctacaaagga atcgctcac tgccttggg agtggtagct 660
 ttgttggtat ggttgctctt cggatacttg atttatcaaa caataacatt ttgaggatat 720
 cagaatcagg ctttcaacat cttgaaaacc ttgcttgttt gtatttagga agtaataatt 780
 taacaaaagt accatcaaat gcctttgaag tacttaaaag tcttagaaga ctttctttgt 840

ctcataatcc	tattgaagca	atacagccct	ttgcatttaa	aggacttgcc	aatctggaat	900
acctcctcct	gaaaaattca	agaattagga	atgttactag	ggatgggttt	agtggaatta	960
ataatcttaa	acatttgatc	ttaagtcata	atgatttaga	gaatttaa	tctgacacat	1020
tcagtttggt	aaagaattta	atctacctta	agttagatag	aaacagaata	attagcattg	1080
ataatgatac	atctgaaaat	atgggagcat	ctttgaagat	ccttaatctg	tcattttaata	1140
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tagagactac	agcagtgtta	cctgtgcaaa	tacaacttac	tacttctgtt	accttgaact	1620
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taaaggcatc	agaaaactca	agggaaaata	gacttgaata	ctacagcttt	tatcagtcag	1860
caagggtataa	tgttaactgcc	tcaatttgta	acacttcccc	aaattctcta	gaaagtcctg	1920
gcttgaggca	gattcgactt	cataaacaaa	ttgttcctga	aaatgaggca	caggtcattc	1980
tttttgaaca	ttctgcttta	taactcaact	aaatattgtc	tataagaaac	ttcagtgcca	2040
tggacatgat	ttaaactgaa	acctccttat	ataattatat	acttttagttg	gaaatataat	2100
gaattatatg	aggttagcat	tattaaaata	tgtttttaat	aaaaaaaaaa	aaaaaaaaaa	2160
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<210> 47

<211> 1866

<212> DNA

<213> Homo sapiens

<400> 47

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gggagacaaa	ttaactgccg	taacttaggc	cttcgagta	ttcctaagaa	ttttcctgaa	180
agtacagttt	ttctgtatct	gactgggaat	aatatatctt	atataaatga	aagtgaatta	240
acaggacttc	attctcttgt	agcattgtat	ttggataatt	ctaacattct	gtatgtatat	300
ccaaaagcct	ttgttcaatt	gaggcatcta	tattttctat	ttctaataaa	taatttcac	360
aaacgcttag	atcctggaat	atttaaggga	cttttaaatt	ttcgtaattt	atatttacag	420
tataatcagg	tatcttttgt	tccgagagga	gtatttaatt	atctagtttc	agttcagtag	480
ttaaactctac	aaaggaatcg	cctcactgtc	cttgggagtg	gtacctttgt	tggtatgggt	540
gctcttcgga	tacttgattt	atcaaacaat	aacattttga	ggatatcaga	atcaggcttt	600
caacatcttg	aaaaccttgc	ttgtttgtat	ttaggaagta	ataatttaac	aaaagtacca	660
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gaagcaatac	agccctttgc	atttaaggga	cttgccaatc	tggaaatacct	cctcctgaaa	780
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aatttaattt	accttaagtt	agatagaaac	agaataatta	gcattgataa	tgatacattt	960
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cgacttcata aacaaattgt tctgaaaat gaggcacagg tcattctttt tgaacattct 1860
gcttta 1866

<210> 48

<211> 622

<212> PRT

<213> Homo sapiens

<400> 48

Met Cys Gly Leu Gln Phe Ser Leu Pro Cys Leu Arg Leu Phe Leu Val
1 5 10 15

Val Thr Cys Tyr Leu Leu Leu Leu His Lys Glu Ile Leu Gly Cys
20 25 30

Ser Ser Val Cys Gln Leu Cys Thr Gly Arg Gln Ile Asn Cys Arg Asn
35 40 45

Leu Gly Leu Ser Ser Ile Pro Lys Asn Phe Pro Glu Ser Thr Val Phe
50 55 60

Leu Tyr Leu Thr Gly Asn Asn Ile Ser Tyr Ile Asn Glu Ser Glu Leu
65 70 75 80

Thr Gly Leu His Ser Leu Val Ala Leu Tyr Leu Asp Asn Ser Asn Ile
85 90 95

Leu Tyr Val Tyr Pro Lys Ala Phe Val Gln Leu Arg His Leu Tyr Phe
100 105 110

Leu Phe Leu Asn Asn Asn Phe Ile Lys Arg Leu Asp Pro Gly Ile Phe
115 120 125

Lys Gly Leu Leu Asn Leu Arg Asn Leu Tyr Leu Gln Tyr Asn Gln Val

130		135		140
Ser Phe Val Pro Arg Gly Val Phe Asn Asp Leu Val Ser Val Gln Tyr				
145		150		155 160
Leu Asn Leu Gln Arg Asn Arg Leu Thr Val Leu Gly Ser Gly Thr Phe				
	165		170	175
Val Gly Met Val Ala Leu Arg Ile Leu Asp Leu Ser Asn Asn Asn Ile				
	180		185	190
Leu Arg Ile Ser Glu Ser Gly Phe Gln His Leu Glu Asn Leu Ala Cys				
	195		200	205
Leu Tyr Leu Gly Ser Asn Asn Leu Thr Lys Val Pro Ser Asn Ala Phe				
	210		215	220
Glu Val Leu Lys Ser Leu Arg Arg Leu Ser Leu Ser His Asn Pro Ile				
	225		230	235 240
Glu Ala Ile Gln Pro Phe Ala Phe Lys Gly Leu Ala Asn Leu Glu Tyr				
		245	250	255
Leu Leu Leu Lys Asn Ser Arg Ile Arg Asn Val Thr Arg Asp Gly Phe				
	260		265	270
Ser Gly Ile Asn Asn Leu Lys His Leu Ile Leu Ser His Asn Asp Leu				
	275		280	285
Glu Asn Leu Asn Ser Asp Thr Phe Ser Leu Leu Lys Asn Leu Ile Tyr				
	290		295	300
Leu Lys Leu Asp Arg Asn Arg Ile Ile Ser Ile Asp Asn Asp Thr Phe				
	305		310	315 320
Glu Asn Met Gly Ala Ser Leu Lys Ile Leu Asn Leu Ser Phe Asn Asn				
		325	330	335
Leu Thr Ala Leu His Pro Arg Val Leu Lys Pro Leu Ser Ser Leu Ile				
	340		345	350
His Leu Gln Ala Asn Ser Asn Pro Trp Glu Cys Asn Cys Lys Leu Leu				
	355		360	365
Gly Leu Arg Asp Trp Leu Ala Ser Ser Ala Ile Thr Leu Asn Ile Tyr				
	370		375	380
Cys Gln Asn Pro Pro Ser Met Arg Gly Arg Ala Leu Arg Tyr Ile Asn				

385		390		395		400
Ile Thr Asn Cys Val Thr Ser Ser Ile Asn Val Ser Arg Ala Trp Ala						
	405		410		415	
Val Val Lys Ser Pro His Ile His His Lys Thr Thr Ala Leu Met Met						
	420		425		430	
Ala Trp His Lys Val Thr Thr Asn Gly Ser Pro Leu Glu Asn Thr Glu						
	435		440		445	
Thr Glu Asn Ile Thr Phe Trp Glu Arg Ile Pro Thr Ser Pro Ala Gly						
	450		455		460	
Arg Phe Phe Gln Glu Asn Ala Phe Gly Asn Pro Leu Glu Thr Thr Ala						
	465		470		475	480
Val Leu Pro Val Gln Ile Gln Leu Thr Thr Ser Val Thr Leu Asn Leu						
		485		490		495
Glu Lys Asn Ser Ala Leu Pro Asn Asp Ala Ala Ser Met Ser Gly Lys						
	500		505		510	
Thr Ser Leu Ile Cys Thr Gln Glu Val Glu Lys Leu Asn Glu Ala Phe						
	515		520		525	
Asp Ile Leu Leu Ala Phe Phe Ile Leu Ala Cys Val Leu Ile Ile Phe						
	530		535		540	
Leu Ile Tyr Lys Val Val Gln Phe Lys Gln Lys Leu Lys Ala Ser Glu						
	545		550		555	560
Asn Ser Arg Glu Asn Arg Leu Glu Tyr Tyr Ser Phe Tyr Gln Ser Ala						
	565		570		575	
Arg Tyr Asn Val Thr Ala Ser Ile Cys Asn Thr Ser Pro Asn Ser Leu						
	580		585		590	
Glu Ser Pro Gly Leu Glu Gln Ile Arg Leu His Lys Gln Ile Val Pro						
	595		600		605	
Glu Asn Glu Ala Gln Val Ile Leu Phe Glu His Ser Ala Leu						
	610		615		620	

<210> 49
 <211> 31
 <212> PRT

<213> Homo sapiens

<400> 49

Met Cys Gly Leu Gln Phe Ser Leu Pro Cys Leu Arg Leu Phe Leu Val
1 5 10 15

Val Thr Cys Tyr Leu Leu Leu Leu Leu His Lys Glu Ile Leu Gly
20 25 30

<210> 50

<211> 591

<212> PRT

<213> Homo sapiens

<400> 50

Cys Ser Ser Val Cys Gln Leu Cys Thr Gly Arg Gln Ile Asn Cys Arg
1 5 10 15

Asn Leu Gly Leu Ser Ser Ile Pro Lys Asn Phe Pro Glu Ser Thr Val
20 25 30

Phe Leu Tyr Leu Thr Gly Asn Asn Ile Ser Tyr Ile Asn Glu Ser Glu
35 40 45

Leu Thr Gly Leu His Ser Leu Val Ala Leu Tyr Leu Asp Asn Ser Asn
50 55 60

Ile Leu Tyr Val Tyr Pro Lys Ala Phe Val Gln Leu Arg His Leu Tyr
65 70 75 80

Phe Leu Phe Leu Asn Asn Phe Ile Lys Arg Leu Asp Pro Gly Ile
85 90 95

Phe Lys Gly Leu Leu Asn Leu Arg Asn Leu Tyr Leu Gln Tyr Asn Gln
100 105 110

Val Ser Phe Val Pro Arg Gly Val Phe Asn Asp Leu Val Ser Val Gln
115 120 125

Tyr Leu Asn Leu Gln Arg Asn Arg Leu Thr Val Leu Gly Ser Gly Thr
130 135 140

Phe Val Gly Met Val Ala Leu Arg Ile Leu Asp Leu Ser Asn Asn Asn
145 150 155 160

Ile Leu Arg Ile Ser Glu Ser Gly Phe Gln His Leu Glu Asn Leu Ala
165 170 175

Cys Leu Tyr Leu Gly Ser Asn Asn Leu Thr Lys Val Pro Ser Asn Ala
180 185 190

Phe Glu Val Leu Lys Ser Leu Arg Arg Leu Ser Leu Ser His Asn Pro
195 200 205

Ile Glu Ala Ile Gln Pro Phe Ala Phe Lys Gly Leu Ala Asn Leu Glu
210 215 220

Tyr Leu Leu Leu Lys Asn Ser Arg Ile Arg Asn Val Thr Arg Asp Gly
225 230 235 240

Phe Ser Gly Ile Asn Asn Leu Lys His Leu Ile Leu Ser His Asn Asp
245 250 255

Leu Glu Asn Leu Asn Ser Asp Thr Phe Ser Leu Leu Lys Asn Leu Ile
260 265 270

Tyr Leu Lys Leu Asp Arg Asn Arg Ile Ile Ser Ile Asp Asn Asp Thr
275 280 285

Phe Glu Asn Met Gly Ala Ser Leu Lys Ile Leu Asn Leu Ser Phe Asn
290 295 300

Asn Leu Thr Ala Leu His Pro Arg Val Leu Lys Pro Leu Ser Ser Leu
305 310 315 320

Ile His Leu Gln Ala Asn Ser Asn Pro Trp Glu Cys Asn Cys Lys Leu
325 330 335

Leu Gly Leu Arg Asp Trp Leu Ala Ser Ser Ala Ile Thr Leu Asn Ile
340 345 350

Tyr Cys Gln Asn Pro Pro Ser Met Arg Gly Arg Ala Leu Arg Tyr Ile
355 360 365

Asn Ile Thr Asn Cys Val Thr Ser Ser Ile Asn Val Ser Arg Ala Trp
370 375 380

Ala Val Val Lys Ser Pro His Ile His His Lys Thr Thr Ala Leu Met
385 390 395 400

Met Ala Trp His Lys Val Thr Thr Asn Gly Ser Pro Leu Glu Asn Thr
405 410 415

Glu Thr Glu Asn Ile Thr Phe Trp Glu Arg Ile Pro Thr Ser Pro Ala
420 425 430

Gly Arg Phe Phe Gln Glu Asn Ala Phe Gly Asn Pro Leu Glu Thr Thr
 435 440 445

Ala Val Leu Pro Val Gln Ile Gln Leu Thr Thr Ser Val Thr Leu Asn
 450 455 460

Leu Glu Lys Asn Ser Ala Leu Pro Asn Asp Ala Ala Ser Met Ser Gly
 465 470 475 480

Lys Thr Ser Leu Ile Cys Thr Gln Glu Val Glu Lys Leu Asn Glu Ala
 485 490 495

Phe Asp Ile Leu Leu Ala Phe Phe Ile Leu Ala Cys Val Leu Ile Ile
 500 505 510

Phe Leu Ile Tyr Lys Val Val Gln Phe Lys Gln Lys Leu Lys Ala Ser
 515 520 525

Glu Asn Ser Arg Glu Asn Arg Leu Glu Tyr Tyr Ser Phe Tyr Gln Ser
 530 535 540

Ala Arg Tyr Asn Val Thr Ala Ser Ile Cys Asn Thr Ser Pro Asn Ser
 545 550 555 560

Leu Glu Ser Pro Gly Leu Glu Gln Ile Arg Leu His Lys Gln Ile Val
 565 570 575

Pro Glu Asn Glu Ala Gln Val Ile Leu Phe Glu His Ser Ala Leu
 580 585 590

<210> 51

<211> 498

<212> PRT

<213> Homo sapiens

<400> 51

Cys Ser Ser Val Cys Gln Leu Cys Thr Gly Arg Gln Ile Asn Cys Arg
 1 5 10 15

Asn Leu Gly Leu Ser Ser Ile Pro Lys Asn Phe Pro Glu Ser Thr Val
 20 25 30

Phe Leu Tyr Leu Thr Gly Asn Asn Ile Ser Tyr Ile Asn Glu Ser Glu
 35 40 45

Leu Thr Gly Leu His Ser Leu Val Ala Leu Tyr Leu Asp Asn Ser Asn

50	55	60
Ile Leu Tyr Val Tyr Pro Lys Ala Phe Val Gln Leu Arg His Leu Tyr		
65	70	75 80
Phe Leu Phe Leu Asn Asn Asn Phe Ile Lys Arg Leu Asp Pro Gly Ile		
	85	90 95
Phe Lys Gly Leu Leu Asn Leu Arg Asn Leu Tyr Leu Gln Tyr Asn Gln		
	100	105 110
Val Ser Phe Val Pro Arg Gly Val Phe Asn Asp Leu Val Ser Val Gln		
	115	120 125
Tyr Leu Asn Leu Gln Arg Asn Arg Leu Thr Val Leu Gly Ser Gly Thr		
	130	135 140
Phe Val Gly Met Val Ala Leu Arg Ile Leu Asp Leu Ser Asn Asn Asn		
	145	150 155 160
Ile Leu Arg Ile Ser Glu Ser Gly Phe Gln His Leu Glu Asn Leu Ala		
	165	170 175
Cys Leu Tyr Leu Gly Ser Asn Asn Leu Thr Lys Val Pro Ser Asn Ala		
	180	185 190
Phe Glu Val Leu Lys Ser Leu Arg Arg Leu Ser Leu Ser His Asn Pro		
	195	200 205
Ile Glu Ala Ile Gln Pro Phe Ala Phe Lys Gly Leu Ala Asn Leu Glu		
	210	215 220
Tyr Leu Leu Leu Lys Asn Ser Arg Ile Arg Asn Val Thr Arg Asp Gly		
	225	230 235 240
Phe Ser Gly Ile Asn Asn Leu Lys His Leu Ile Leu Ser His Asn Asp		
	245	250 255
Leu Glu Asn Leu Asn Ser Asp Thr Phe Ser Leu Leu Lys Asn Leu Ile		
	260	265 270
Tyr Leu Lys Leu Asp Arg Asn Arg Ile Ile Ser Ile Asp Asn Asp Thr		
	275	280 285
Phe Glu Asn Met Gly Ala Ser Leu Lys Ile Leu Asn Leu Ser Phe Asn		
	290	295 300
Asn Leu Thr Ala Leu His Pro Arg Val Leu Lys Pro Leu Ser Ser Leu		

305		310		315		320
Ile His Leu Gln Ala Asn Ser Asn Pro Trp Glu Cys Asn Cys Lys Leu						
	325			330		335
Leu Gly Leu Arg Asp Trp Leu Ala Ser Ser Ala Ile Thr Leu Asn Ile						
	340			345		350
Tyr Cys Gln Asn Pro Pro Ser Met Arg Gly Arg Ala Leu Arg Tyr Ile						
	355			360		365
Asn Ile Thr Asn Cys Val Thr Ser Ser Ile Asn Val Ser Arg Ala Trp						
	370			375		380
Ala Val Val Lys Ser Pro His Ile His His Lys Thr Thr Ala Leu Met						
	385			390		395
						400
Met Ala Trp His Lys Val Thr Thr Asn Gly Ser Pro Leu Glu Asn Thr						
				410		415
Glu Thr Glu Asn Ile Thr Phe Trp Glu Arg Ile Pro Thr Ser Pro Ala						
	420			425		430
Gly Arg Phe Phe Gln Glu Asn Ala Phe Gly Asn Pro Leu Glu Thr Thr						
	435			440		445
Ala Val Leu Pro Val Gln Ile Gln Leu Thr Thr Ser Val Thr Leu Asn						
	450			455		460
Leu Glu Lys Asn Ser Ala Leu Pro Asn Asp Ala Ala Ser Met Ser Gly						
	465			470		475
						480
Lys Thr Ser Leu Ile Cys Thr Gln Glu Val Glu Lys Leu Asn Glu Ala						
	485			490		495
Phe Asp						

<210> 52
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 52
 Ile Leu Leu Ala Phe Phe Ile Leu Ala Cys Val Leu Ile Ile Phe Leu
 1 5 10 15

Ile Tyr

<210> 53

<211> 75

<212> PRT

<213> Homo sapiens

<400> 53

Lys Val Val Gln Phe Lys Gln Lys Leu Lys Ala Ser Glu Asn Ser Arg
1 5 10 15

Glu Asn Arg Leu Glu Tyr Tyr Ser Phe Tyr Gln Ser Ala Arg Tyr Asn
20 25 30

Val Thr Ala Ser Ile Cys Asn Thr Ser Pro Asn Ser Leu Glu Ser Pro
35 40 45

Gly Leu Glu Gln Ile Arg Leu His Lys Gln Ile Val Pro Glu Asn Glu
50 55 60

Ala Gln Val Ile Leu Phe Glu His Ser Ala Leu
65 70 75

<210> 54

<211> 1432

<212> DNA

<213> Homo sapiens

<400> 54

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cactgaaagt gtgctgctct ccaggaacct acggtcccga ctgtctcgca tgccaggggc 540
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<210> 55

<211> 1059

<212> DNA

<213> Homo sapiens

<400> 55

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<210> 56

<211> 353

<212> PRT

<213> Homo sapiens

<400> 56

Met Arg Leu Pro Arg Arg Ala Ala Leu Gly Leu Leu Pro Leu Leu Leu
 1 5 10 15

Leu Leu Pro Pro Ala Pro Glu Ala Ala Lys Lys Pro Thr Pro Cys His
 20 25 30

Ala Asp Val Asp Glu Cys Ser Leu Ala Glu Lys Thr Cys Val Arg Lys
290 295 300

Asn Glu Asn Cys Tyr Asn Thr Pro Gly Ser Tyr Val Cys Val Cys Pro
305 310 315 320

Asp Gly Phe Glu Glu Thr Glu Asp Ala Cys Val Pro Pro Ala Glu Ala
325 330 335

Glu Ala Thr Glu Gly Glu Ser Pro Thr Gln Leu Pro Ser Arg Glu Asp
340 345 350

Leu

<210> 57

<211> 24

<212> PRT

<213> Homo sapiens

<400> 57

Met Arg Leu Pro Arg Arg Ala Ala Leu Gly Leu Leu Pro Leu Leu Leu
1 5 10 15

Leu Leu Pro Pro Ala Pro Glu Ala
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<210> 58

<211> 329

<212> PRT

<213> Homo sapiens

<400> 58

Ala Lys Lys Pro Thr Pro Cys His Arg Cys Arg Gly Leu Val Asp Lys
1 5 10 15

Phe Asn Gln Gly Met Val Asp Thr Ala Lys Lys Asn Phe Gly Gly Gly
20 25 30

Asn Thr Ala Trp Glu Glu Lys Thr Leu Ser Lys Tyr Glu Ser Ser Glu
35 40 45

Ile Arg Leu Leu Glu Ile Leu Glu Gly Leu Cys Glu Ser Ser Asp Phe
50 55 60

Glu Cys Asn Gln Met Leu Glu Ala Gln Glu Glu His Leu Glu Ala Trp

<210> 59

<211> 2730

<212> DNA

<213> Homo sapiens

<400> 59

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gagaacccgt	acccccacag	agccttaagc	aactacttct	gtgaagtatt	ttttgactgt	2640
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aaaaaaaaaa	aaaaaaaaaa	gggcggccgc				2730

<210> 60

<211> 2013

<212> DNA

<213> Homo sapiens

<400> 60

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ggcgacgcgc	cactgcaggg	cgtgctcggc	ggcgccctca	ccatcccttg	ccacgtccac	180
tacctgcggc	caccgccgag	ccgccgggct	gtgctgggct	ctccgcgggt	caagtggact	240
ttcctgtccc	ggggccggga	ggcagagggt	ctggtggcgc	ggggagtgcg	cgtcaagggt	300
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cacggcatcg	atgacagcag	cgacgctgtg	gaggtaagg	tcaaaggggt	cgtctttctc	480
taccgagagg	gctctgcccc	ctatgctttc	tccttttctg	gggcccagga	ggcctgtgcc	540
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gcagggacct	cagtgcaggc	ccagccagtg	ctgcccactg	acagcgccag	ccgagggtga	1920
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ctccttttct tccccctgca gctctgggctc acc

2013

<210> 61

<211> 671

<212> PRT

<213> Homo sapiens

<400> 61

Met Ala Gln Leu Phe Leu Pro Leu Leu Ala Ala Leu Val Leu Ala Gln

1 5 10 15

Ala Pro Ala Ala Leu Ala Asp Val Leu Glu Gly Asp Ser Ser Glu Asp

20 25 30

Arg Ala Phe Arg Val Arg Ile Ala Gly Asp Ala Pro Leu Gln Gly Val

35 40 45

Leu Gly Gly Ala Leu Thr Ile Pro Cys His Val His Tyr Leu Arg Pro

50 55 60

Pro Pro Ser Arg Arg Ala Val Leu Gly Ser Pro Arg Val Lys Trp Thr

65 70 75 80

Phe Leu Ser Arg Gly Arg Glu Ala Glu Val Leu Val Ala Arg Gly Val

85 90 95

Arg Val Lys Val Asn Glu Ala Tyr Arg Phe Arg Val Ala Leu Pro Ala

100 105 110

Tyr Pro Ala Ser Leu Thr Asp Val Ser Leu Ala Leu Ser Glu Leu Arg

115 120 125

Pro Asn Asp Ser Gly Ile Tyr Arg Cys Glu Val Gln His Gly Ile Asp

130 135 140

Asp Ser Ser Asp Ala Val Glu Val Lys Val Lys Gly Val Val Phe Leu

145 150 155 160

Tyr Arg Glu Gly Ser Ala Arg Tyr Ala Phe Ser Phe Ser Gly Ala Gln

165 170 175

Glu Ala Cys Ala Arg Ile Gly Ala His Ile Ala Thr Pro Glu Gln Leu

180 185 190

Tyr Ala Ala Tyr Leu Gly Gly Tyr Glu Gln Cys Asp Ala Gly Trp Leu

195 200 205

Ser Asp Gln Thr Val Arg Tyr Pro Ile Gln Thr Pro Arg Glu Ala Cys
210 215 220

Tyr Gly Asp Met Asp Gly Phe Pro Gly Val Arg Asn Tyr Gly Val Val
225 230 235 240

Asp Pro Asp Asp Leu Tyr Asp Val Tyr Cys Tyr Ala Glu Asp Leu Asn
245 250 255

Gly Glu Leu Phe Leu Gly Asp Pro Pro Glu Lys Leu Thr Leu Glu Glu
260 265 270

Ala Arg Ala Tyr Cys Gln Glu Arg Gly Ala Glu Ile Ala Thr Thr Gly
275 280 285

Gln Leu Tyr Ala Ala Trp Asp Gly Gly Leu Asp His Cys Ser Pro Gly
290 295 300

Trp Leu Ala Asp Gly Ser Val Arg Tyr Pro Ile Val Thr Pro Ser Gln
305 310 315 320

Arg Cys Gly Gly Gly Leu Pro Gly Val Lys Thr Leu Phe Leu Phe Pro
325 330 335

Asn Gln Thr Gly Phe Pro Asn Lys His Ser Arg Phe Asn Val Tyr Cys
340 345 350

Phe Arg Asp Ser Ala Gln Pro Ser Ala Ile Pro Glu Ala Ser Asn Pro
355 360 365

Ala Ser Asn Pro Ala Ser Asp Gly Leu Glu Ala Ile Val Thr Val Thr
370 375 380

Glu Thr Leu Glu Glu Leu Gln Leu Pro Gln Glu Ala Thr Glu Ser Glu
385 390 395 400

Ser Arg Gly Ala Ile Tyr Ser Ile Pro Ile Met Glu Asp Gly Gly Gly
405 410 415

Gly Ser Ser Thr Pro Glu Asp Pro Ala Glu Ala Pro Arg Thr Leu Leu
420 425 430

Glu Phe Glu Thr Gln Ser Met Val Pro Pro Thr Gly Phe Ser Glu Glu
435 440 445

Glu Gly Lys Ala Leu Glu Glu Glu Glu Lys Tyr Glu Asp Glu Glu Glu
450 455 460

Lys Glu Glu Glu Glu Glu Glu Glu Glu Val Glu Asp Glu Ala Leu Trp
465 470 475 480

Ala Trp Pro Ser Glu Leu Ser Ser Pro Gly Pro Glu Ala Ser Leu Pro
485 490 495

Thr Glu Pro Ala Ala Gln Glu Lys Ser Leu Ser Gln Ala Pro Ala Arg
500 505 510

Ala Val Leu Gln Pro Gly Ala Ser Pro Leu Pro Asp Gly Glu Ser Glu
515 520 525

Ala Ser Arg Pro Pro Arg Val His Gly Pro Pro Thr Glu Thr Leu Pro
530 535 540

Thr Pro Arg Glu Arg Asn Leu Ala Ser Pro Ser Pro Ser Thr Leu Val
545 550 555 560

Glu Ala Arg Glu Val Gly Glu Ala Thr Gly Gly Pro Glu Leu Ser Gly
565 570 575

Val Pro Arg Gly Glu Ser Glu Glu Thr Gly Ser Ser Glu Gly Ala Pro
580 585 590

Ser Leu Leu Pro Ala Thr Arg Ala Pro Glu Gly Thr Arg Glu Leu Glu
595 600 605

Ala Pro Ser Glu Asp Asn Ser Gly Arg Thr Ala Pro Ala Gly Thr Ser
610 615 620

Val Gln Ala Gln Pro Val Leu Pro Thr Asp Ser Ala Ser Arg Gly Gly
625 630 635 640

Val Ala Val Val Pro Ala Ser Gly Asn Ser Ala Gln Gly Ser Thr Ala
645 650 655

Leu Ser Ile Leu Leu Leu Phe Phe Pro Leu Gln Leu Trp Val Thr
660 665 670

<210> 62

<211> 22

<212> PRT

<213> Homo sapiens

<400> 62

Met Ala Gln Leu Phe Leu Pro Leu Leu Ala Ala Leu Val Leu Ala Gln
1 5 10 15

Ala Pro Ala Ala Leu Ala
20

<210> 63
<211> 649
<212> PRT
<213> Homo sapiens

<400> 63

Asp Val Leu Glu Gly Asp Ser Ser Glu Asp Arg Ala Phe Arg Val Arg
1 5 10 15

Ile Ala Gly Asp Ala Pro Leu Gln Gly Val Leu Gly Gly Ala Leu Thr
20 25 30

Ile Pro Cys His Val His Tyr Leu Arg Pro Pro Pro Ser Arg Arg Ala
35 40 45

Val Leu Gly Ser Pro Arg Val Lys Trp Thr Phe Leu Ser Arg Gly Arg
50 55 60

Glu Ala Glu Val Leu Val Ala Arg Gly Val Arg Val Lys Val Asn Glu
65 70 75 80

Ala Tyr Arg Phe Arg Val Ala Leu Pro Ala Tyr Pro Ala Ser Leu Thr
85 90 95

Asp Val Ser Leu Ala Leu Ser Glu Leu Arg Pro Asn Asp Ser Gly Ile
100 105 110

Tyr Arg Cys Glu Val Gln His Gly Ile Asp Asp Ser Ser Asp Ala Val
115 120 125

Glu Val Lys Val Lys Gly Val Val Phe Leu Tyr Arg Glu Gly Ser Ala
130 135 140

Arg Tyr Ala Phe Ser Phe Ser Gly Ala Gln Glu Ala Cys Ala Arg Ile
145 150 155 160

Gly Ala His Ile Ala Thr Pro Glu Gln Leu Tyr Ala Ala Tyr Leu Gly
165 170 175

Gly Tyr Glu Gln Cys Asp Ala Gly Trp Leu Ser Asp Gln Thr Val Arg
180 185 190

Tyr Pro Ile Gln Thr Pro Arg Glu Ala Cys Tyr Gly Asp Met Asp Gly

195		200		205
Phe Pro Gly Val Arg Asn Tyr Gly Val Val Asp Pro Asp Asp Leu Tyr				
210		215		220
Asp Val Tyr Cys Tyr Ala Glu Asp Leu Asn Gly Glu Leu Phe Leu Gly				
225		230		235 240
Asp Pro Pro Glu Lys Leu Thr Leu Glu Glu Ala Arg Ala Tyr Cys Gln				
	245		250	255
Glu Arg Gly Ala Glu Ile Ala Thr Thr Gly Gln Leu Tyr Ala Ala Trp				
	260		265	270
Asp Gly Gly Leu Asp His Cys Ser Pro Gly Trp Leu Ala Asp Gly Ser				
	275		280	285
Val Arg Tyr Pro Ile Val Thr Pro Ser Gln Arg Cys Gly Gly Gly Leu				
	290		295	300
Pro Gly Val Lys Thr Leu Phe Leu Phe Pro Asn Gln Thr Gly Phe Pro				
305		310		315 320
Asn Lys His Ser Arg Phe Asn Val Tyr Cys Phe Arg Asp Ser Ala Gln				
	325		330	335
Pro Ser Ala Ile Pro Glu Ala Ser Asn Pro Ala Ser Asn Pro Ala Ser				
	340		345	350
Asp Gly Leu Glu Ala Ile Val Thr Val Thr Glu Thr Leu Glu Glu Leu				
	355		360	365
Gln Leu Pro Gln Glu Ala Thr Glu Ser Glu Ser Arg Gly Ala Ile Tyr				
	370		375	380
Ser Ile Pro Ile Met Glu Asp Gly Gly Gly Gly Ser Ser Thr Pro Glu				
385		390		395 400
Asp Pro Ala Glu Ala Pro Arg Thr Leu Leu Glu Phe Glu Thr Gln Ser				
	405		410	415
Met Val Pro Pro Thr Gly Phe Ser Glu Glu Glu Gly Lys Ala Leu Glu				
	420		425	430
Glu Glu Glu Lys Tyr Glu Asp Glu Glu Glu Lys Glu Glu Glu Glu				
	435		440	445
Glu Glu Glu Val Glu Asp Glu Ala Leu Trp Ala Trp Pro Ser Glu Leu				

450		455		460
Ser Ser Pro Gly Pro Glu Ala Ser Leu Pro Thr Glu Pro Ala Ala Gln				
465		470		480
Glu Lys Ser Leu Ser Gln Ala Pro Ala Arg Ala Val Leu Gln Pro Gly				
	485		490	495
Ala Ser Pro Leu Pro Asp Gly Glu Ser Glu Ala Ser Arg Pro Pro Arg				
	500		505	510
Val His Gly Pro Pro Thr Glu Thr Leu Pro Thr Pro Arg Glu Arg Asn				
	515		520	525
Leu Ala Ser Pro Ser Pro Ser Thr Leu Val Glu Ala Arg Glu Val Gly				
	530		535	540
Glu Ala Thr Gly Gly Pro Glu Leu Ser Gly Val Pro Arg Gly Glu Ser				
	545		550	555
Glu Glu Thr Gly Ser Ser Glu Gly Ala Pro Ser Leu Leu Pro Ala Thr				
	565		570	575
Arg Ala Pro Glu Gly Thr Arg Glu Leu Glu Ala Pro Ser Glu Asp Asn				
	580		585	590
Ser Gly Arg Thr Ala Pro Ala Gly Thr Ser Val Gln Ala Gln Pro Val				
	595		600	605
Leu Pro Thr Asp Ser Ala Ser Arg Gly Gly Val Ala Val Val Pro Ala				
	610		615	620
Ser Gly Asn Ser Ala Gln Gly Ser Thr Ala Leu Ser Ile Leu Leu Leu				
	625		630	635
				640
Phe Phe Pro Leu Gln Leu Trp Val Thr				
	645			

<210> 64
 <211> 456
 <212> PRT
 <213> Sus scrofa

<400> 64
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Glu Leu Leu Pro Leu Leu Gln Gln Tyr Glu Val Val Arg Leu Asp Asp
 20 25 30

Cys Gly Leu Thr Glu Glu His Cys Lys Asp Ile Gly Ser Ala Leu Arg
 35 40 45

Ala Asn Pro Ser Leu Thr Glu Leu Cys Leu Arg Thr Asn Glu Leu Gly
 50 55 60

Asp Ala Gly Val His Leu Val Leu Gln Gly Leu Gln Ser Pro Thr Cys
 65 70 75 80

Lys Ile Gln Lys Leu Ser Leu Gln Asn Cys Ser Leu Thr Glu Ala Gly
 85 90 95

Cys Gly Val Leu Pro Ser Thr Leu Arg Ser Leu Pro Thr Leu Arg Glu
 100 105 110

Leu His Leu Ser Asp Asn Pro Leu Gly Asp Ala Gly Leu Arg Leu Leu
 115 120 125

Cys Glu Gly Leu Leu Asp Pro Gln Cys His Leu Glu Lys Leu Gln Leu
 130 135 140

Glu Tyr Cys Arg Leu Thr Ala Ala Ser Cys Glu Pro Leu Ala Ser Val
 145 150 155 160

Leu Arg Ala Thr Arg Ala Leu Lys Glu Leu Thr Val Ser Asn Asn Asp
 165 170 175

Ile Gly Glu Ala Gly Ala Arg Val Leu Gly Gln Gly Leu Ala Asp Ser
 180 185 190

Ala Cys Gln Leu Glu Thr Leu Arg Leu Glu Asn Cys Gly Leu Thr Pro
 195 200 205

Ala Asn Cys Lys Asp Leu Cys Gly Ile Val Ala Ser Gln Ala Ser Leu
 210 215 220

Arg Glu Leu Asp Leu Gly Ser Asn Gly Leu Gly Asp Ala Gly Ile Ala
 225 230 235 240

Glu Leu Cys Pro Gly Leu Leu Ser Pro Ala Ser Arg Leu Lys Thr Leu
 245 250 255

Trp Leu Trp Glu Cys Asp Ile Thr Ala Ser Gly Cys Arg Asp Leu Cys
 260 265 270

Arg Val Leu Gln Ala Lys Glu Thr Leu Lys Glu Leu Ser Leu Ala Gly
275 280 285

Asn Lys Leu Gly Asp Glu Gly Ala Arg Leu Leu Cys Glu Ser Leu Leu
290 295 300

Gln Pro Gly Cys Gln Leu Glu Ser Leu Trp Val Lys Ser Cys Ser Leu
305 310 315 320

Thr Ala Ala Cys Cys Gln His Val Ser Leu Met Leu Thr Gln Asn Lys
325 330 335

His Leu Leu Glu Leu Gln Leu Ser Ser Asn Lys Leu Gly Asp Ser Gly
340 345 350

Ile Gln Glu Leu Cys Gln Ala Leu Ser Gln Pro Gly Thr Thr Leu Arg
355 360 365

Val Leu Cys Leu Gly Asp Cys Glu Val Thr Asn Ser Gly Cys Ser Ser
370 375 380

Leu Ala Ser Leu Leu Leu Ala Asn Arg Ser Leu Arg Glu Leu Asp Leu
385 390 395 400

Ser Asn Asn Cys Val Gly Asp Pro Gly Val Leu Gln Leu Leu Gly Ser
405 410 415

Leu Glu Gln Pro Gly Cys Ala Leu Glu Gln Leu Val Leu Tyr Asp Thr
420 425 430

Tyr Trp Thr Glu Glu Val Glu Asp Arg Leu Gln Ala Leu Glu Gly Ser
435 440 445

Lys Pro Gly Leu Arg Val Ile Ser
450 455

<210> 65
<211> 834
<212> PRT
<213> Mus sp.

<400> 65
Met Ala Pro His Trp Ala Val Trp Leu Leu Ala Ala Gly Leu Trp Gly
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Leu Gly Ile Gly Ala Glu Met Trp Trp Asn Leu Val Pro Arg Lys Thr
20 25 30

Val Ser Ser Gly Glu Leu Val Thr Val Val Arg Arg Phe Ser Gln Thr
 35 40 45
 Gly Ile Gln Asp Phe Leu Thr Leu Thr Leu Thr Glu His Ser Gly Leu
 50 55 60
 Leu Tyr Val Gly Ala Arg Glu Ala Leu Phe Ala Phe Ser Val Glu Ala
 65 70 75 80
 Leu Glu Leu Gln Gly Ala Ile Ser Trp Glu Ala Pro Ala Glu Lys Lys
 85 90 95
 Ile Glu Cys Thr Gln Lys Gly Lys Ser Asn Gln Thr Glu Cys Phe Asn
 100 105 110
 Phe Ile Arg Phe Leu Gln Pro Tyr Asn Ser Ser His Leu Tyr Val Cys
 115 120 125
 Gly Thr Tyr Ala Phe Gln Pro Lys Cys Thr Tyr Ile Asn Met Leu Thr
 130 135 140
 Phe Thr Leu Asp Arg Ala Glu Phe Glu Asp Gly Lys Gly Lys Cys Pro
 145 150 155 160
 Tyr Asp Pro Ala Lys Gly His Thr Gly Leu Leu Val Asp Gly Glu Leu
 165 170 175
 Tyr Ser Ala Thr Leu Asn Asn Phe Leu Gly Thr Glu Pro Val Ile Leu
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Gly Ala Ser Trp His Asn Thr Thr Phe Phe Gly Val Phe Gln Ala Arg
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Trp Gly Asp Met Asp Leu Ser Ala Val Cys Glu Tyr Gln Leu Glu Gln
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Gln Lys Trp Ala Arg Tyr Thr Asp Pro Val Pro Ser Pro Arg Pro Gly
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Ser Cys Ile Asn Asn Trp His Arg Asp Asn Gly Tyr Thr Ser Ser Leu
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Glu Leu Pro Asp Asn Thr Leu Asn Phe Ile Lys Lys His Pro Leu Met
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Glu Asp Gln Val Lys Pro Arg Leu Gly Arg Pro Leu Leu Val Lys Lys
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Gly Ala Thr Tyr Thr Val Leu Phe Ile Gly Thr Gly Asp Gly Trp Leu
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Gln Val Phe Asp Gln Glu Pro Val Glu Ser Leu Val Leu Ser Gln Ser
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Lys Lys Val Leu Phe Ala Gly Ser Arg Ser Gln Leu Val Gln Leu Ser
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Arg Asp Pro Tyr Cys Ala Trp Asn Val Asn Thr Ser Arg Cys Val Ala
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Gly Gly Ser Gly His Pro Leu Pro Glu Leu Ala Asp Glu Leu Arg Arg
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Gly Ala Phe Gln Asp Leu Lys Glu Leu Glu Arg Leu Arg Leu Asn Arg
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Asn His Leu Gln Leu Phe Pro Glu Leu Leu Phe Leu Gly Thr Ala Lys
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Leu Tyr Arg Leu Asp Leu Ser Glu Asn Gln Ile Gln Ala Ile Pro Arg
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Ala Ser Phe Asn His Met Pro Lys Leu Arg Thr Phe Arg Leu His Ser
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Pro Pro Arg Thr Phe Asp Gly Leu Lys Ser Leu Arg Leu Leu Ser Leu
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Cys Asp Ile Asp Phe Asp Asp Cys Gln Asp Asn Lys Cys Lys Asn Gly
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<210> 69

<211> 348

<212> PRT

<213> *Cricetulus griseus*

<400> 69

Met His Leu Pro Pro Ala Ala Ala Val Gly Leu Leu Leu Leu Leu Leu
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Pro Pro Pro Ala Arg Val Ala Ser Arg Lys Pro Thr Met Cys Gln Arg
 20 25 30

Cys Arg Ala Leu Val Asp Lys Phe Asn Gln Gly Met Ala Asn Thr Ala
 35 40 45

Arg Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Lys Ser Leu
 50 55 60

Ser	Lys	Tyr	Glu	Phe	Ser	Glu	Ile	Arg	Leu	Leu	Glu	Ile	Met	Glu	Gly	65	70	75	80
Leu	Cys	Asp	Ser	Asn	Asp	Phe	Glu	Cys	Asn	Gln	Leu	Leu	Glu	Gln	His	85	90	95	
Glu	Glu	Gln	Leu	Glu	Ala	Trp	Trp	Gln	Thr	Leu	Lys	Lys	Glu	Cys	Pro	100	105	110	
Asn	Leu	Phe	Glu	Trp	Phe	Cys	Val	His	Thr	Leu	Lys	Ala	Cys	Cys	Leu	115	120	125	
Pro	Gly	Thr	Tyr	Gly	Pro	Asp	Cys	Gln	Glu	Cys	Gln	Gly	Gly	Ser	Gln	130	135	140	
Arg	Pro	Cys	Ser	Gly	Asn	Gly	His	Cys	Asp	Gly	Asp	Gly	Ser	Arg	Gln	145	150	155	160
Gly	Asp	Gly	Ser	Cys	Gln	Cys	His	Val	Gly	Tyr	Lys	Gly	Pro	Leu	Cys	165	170	175	
Ile	Asp	Cys	Met	Asp	Gly	Tyr	Phe	Ser	Leu	Leu	Arg	Asn	Glu	Thr	His	180	185	190	
Ser	Phe	Cys	Thr	Ala	Cys	Asp	Glu	Ser	Cys	Lys	Thr	Cys	Ser	Gly	Pro	195	200	205	
Thr	Asn	Lys	Gly	Cys	Val	Glu	Cys	Glu	Val	Gly	Trp	Thr	Arg	Val	Glu	210	215	220	
Asp	Ala	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Ala	Glu	Thr	Pro	Pro	Cys	225	230	235	240
Ser	Asn	Val	Gln	Tyr	Cys	Glu	Asn	Val	Asn	Gly	Ser	Tyr	Thr	Cys	Glu	245	250	255	
Glu	Cys	Asp	Ser	Thr	Cys	Val	Gly	Cys	Thr	Gly	Lys	Gly	Pro	Ala	Asn	260	265	270	
Cys	Lys	Glu	Cys	Ile	Ser	Gly	Tyr	Ser	Lys	Gln	Lys	Gly	Glu	Cys	Ala	275	280	285	
Asp	Ile	Asp	Glu	Cys	Ser	Leu	Glu	Thr	Lys	Val	Cys	Lys	Lys	Glu	Asn	290	295	300	
Glu	Asn	Cys	Tyr	Asn	Thr	Pro	Gly	Ser	Phe	Val	Cys	Val	Cys	Pro	Glu	305	310	315	320

Gly Phe Glu Glu Asp Arg Arg Cys Leu Cys Thr Asp Ser Arg Arg Arg
 325 330 335

Ser Gly Arg Gly Lys Ser His Thr Ala Thr Leu Pro
 340 345

<210> 70
 <211> 1399
 <212> DNA
 <213> *Cricetulus griseus*

<400> 70
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 ctgctactgc tgctgctgcc gcctcccgcg cgcgtggcct cccggaagcc gacaatgtgc 180
 cagaggtgcc gggcgctggg ggacaagttc aaccagggga tggccaacac ggccagggaag 240
 aatttcggcg gcggaacac ggcggtggag gagaagagtc tgtccaagta cgaattcagt 300
 gagattcggc tcctggagat tatggagggc ctgtgtgaca gcaacgactt tgaatgcaac 360
 caactcttgg aacagcatga ggagcagcta gaggcctggg ggagacact gaagaaggag 420
 tgccctaacc tatttgagtg gttctgtgta cacacactga aagcatgctg tcttccaggc 480
 acctatgggc cagactgtca ggaatgccag ggtgggtctc agaggccttg tagcgggaat 540
 ggccactgcg acggagatgg cagcagacag ggcgacgggt cctgccagtg tcacgtagga 600
 tacaaggggc cgctgtgtat cgactgcatg gatggctact tcagcttgct gaggaacgag 660
 acccacagct tctgcacagc ctgtgatgag tcctgcaaga catgctcagg tccaaccaac 720
 aaaggctgtg tggagtgcga agtgggctgg acacgtgtgg aggatgcctg tgtggatgtt 780
 gacgagtgtg cagcagagac cccaccctgc agcaatgtac agtactgtga aaatgtcaac 840
 ggctcctaca catgtgaaga gtgtgattct acctgtgtgg gctgcacagg aaaaggcca 900
 gccaatgtga aagagtgtat ctctggctac agcaagcaga aaggagagtg tgcagatata 960
 gatgaatgct cattagaaac aaagggtgtg aagaaggaaa atgagaactg ctacaatact 1020
 ccaggagct ttgtctgct gtgtccggaa ggtttcgagg aagacagaag atgcttgtgt 1080
 acagacagca gaaggcgaag tggcagagga aagtcacaca cagccaccct cccatgagga 1140
 tttgtgacgg gcatccaggg tcagaagctg gactctcacc cttttaagtt attgagagga 1200
 catcctatag aaaatgtggc ccatggacat caacccatt tctccaggaa gttttggagg 1260
 aagaagctgc ctgctttgaa acagtagata ctcaattggc cctttaaaac gctgcatttc 1320
 ttggtggttc ttaaacagat tcgtatattt tgatactgtt ctttataata aaattgatca 1380
 ttgaaggtca ccaggaaca 1399

<210> 71
 <211> 528
 <212> PRT
 <213> *Homo sapiens*

<400> 71
 Met Ala Gln Leu Phe Leu Pro Leu Leu Ala Ala Leu Val Leu Ala Gln
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Ala Pro Ala Ala Leu Ala Asp Val Leu Glu Gly Asp Ser Ser Glu Asp
 20 25 30

Arg Ala Phe Arg Val Arg Ile Ala Gly Asp Ala Pro Leu Gln Gly Val
 35 40 45

Leu Gly Gly Ala Leu Thr Ile Pro Cys His Val His Tyr Leu Arg Pro
 50 55 60

Pro Pro Ser Arg Arg Ala Val Leu Gly Ser Pro Arg Val Lys Trp Thr
 65 70 75 80

Phe Leu Ser Arg Gly Arg Glu Ala Glu Val Leu Val Ala Arg Gly Val
 85 90 95

Arg Val Lys Val Asn Glu Ala Tyr Arg Phe Arg Val Ala Leu Pro Ala
 100 105 110

Tyr Pro Ala Ser Leu Thr Asp Val Ser Leu Ala Leu Ser Glu Leu Arg
 115 120 125

Pro Asn Asp Ser Gly Ile Tyr Arg Cys Glu Val Gln His Gly Ile Asp
 130 135 140

Asp Ser Ser Asp Ala Val Glu Ser Ser Gln Arg Tyr Pro Ile Gln Thr
 145 150 155 160

Pro Arg Glu Ala Cys Tyr Gly Asp Met Asp Gly Phe Pro Gly Val Arg
 165 170 175

Asn Tyr Gly Val Val Asp Pro Asp Asp Leu Tyr Asp Val Tyr Cys Tyr
 180 185 190

Ala Glu Asp Leu Asn Gly Glu Leu Phe Leu Gly Asp Pro Pro Glu Lys
 195 200 205

Leu Thr Leu Glu Glu Ala Arg Ala Tyr Cys Gln Glu Arg Gly Ala Glu
 210 215 220

Ile Ala Thr Thr Gly Gln Leu Tyr Ala Ala Trp Asp Gly Gly Leu Asp
 225 230 235 240

His Cys Ser Pro Gly Trp Leu Ala Asp Gly Ser Val Arg Tyr Pro Ile
 245 250 255

Val Thr Pro Ser Gln Arg Cys Gly Gly Gly Leu Pro Gly Val Lys Thr
 260 265 270

Leu Phe Leu Phe Pro Asn Gln Thr Gly Phe Pro Asn Lys His Ser Arg
 275 280 285

Phe Asn Val Tyr Cys Phe Arg Asp Ser Ala Gln Leu Leu Pro Ser Leu
 290 295 300

Arg Pro Pro Thr Gln Pro Pro Thr Gln Leu Asp Gly Leu Glu Ala Ile
 305 310 315 320

Val Thr Val Thr Glu Thr Leu Glu Glu Leu Gln Leu Pro Gln Glu Ala
 325 330 335

Thr Glu Ser Glu Ser Arg Gly Ala Ile Tyr Ser Ile Pro Ile Met Glu
 340 345 350

Asp Gly Gly Gly Gly Ser Ser Thr Pro Glu Asp Pro Ala Glu Ala Pro
 355 360 365

Arg Thr Leu Leu Glu Phe Glu Thr Gln Ser Met Val Pro Pro Thr Gly
 370 375 380

Phe Ser Glu Glu Glu Gly Lys Ala Leu Glu Glu Glu Glu Lys Tyr Glu
 385 390 395 400

Asp Glu Glu Glu Lys Glu Glu Glu Glu Glu Glu Glu Glu Val Glu Asp
 405 410 415

Glu Ala Leu Trp Ala Trp Pro Ser Glu Leu Ser Ser Pro Gly Pro Glu
 420 425 430

Ala Ser Leu Pro Thr Glu Pro Ala Ala Gln Glu Glu Ser Leu Ser Gln
 435 440 445

Ala Pro Ala Arg Ala Val Leu Gln Pro Gly Ala Ser Pro Leu Pro Asp
 450 455 460

Gly Glu Ser Glu Ala Ser Arg Pro Pro Arg Val His Gly Pro Pro Thr
 465 470 475 480

Glu Thr Leu Pro Thr Pro Arg Glu Arg Asn Leu Ala Ser Pro Ser Pro
 485 490 495

Ser Thr Leu Val Glu Ala Arg Glu Val Gly Glu Ala Thr Gly Gly Pro
 500 505 510

Glu Leu Ser Gly Val Pro Arg Gly Gly Ala Arg Thr Gln Phe Ala Leu
 515 520 525

<210> 72
 <211> 883
 <212> PRT
 <213> Mus sp.

<400> 72

Met Ile Pro Leu Leu Leu Ser Leu Leu Ala Ala Leu Val Leu Thr Gln
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Ala Pro Ala Ala Leu Ala Asp Asp Leu Lys Glu Asp Ser Ser Glu Asp
 20 25 30

Arg Ala Phe Arg Val Arg Ile Gly Ala Ala Gln Leu Arg Gly Val Leu
 35 40 45

Gly Gly Ala Leu Ala Ile Pro Cys His Val His His Leu Arg Pro Pro
 50 55 60

Arg Ser Arg Arg Ala Ala Pro Gly Phe Pro Arg Val Lys Trp Thr Phe
 65 70 75 80

Leu Ser Gly Asp Arg Glu Val Glu Val Leu Val Ala Arg Gly Leu Arg
 85 90 95

Val Lys Val Asn Glu Ala Tyr Arg Phe Arg Val Ala Leu Pro Ala Tyr
 100 105 110

Pro Ala Ser Leu Thr Asp Val Ser Leu Val Leu Ser Glu Leu Arg Pro
 115 120 125

Asn Asp Ser Gly Val Tyr Arg Cys Glu Val Gln His Gly Ile Asp Asp
 130 135 140

Ser Ser Asp Ala Val Glu Val Lys Val Lys Gly Val Val Phe Leu Tyr
 145 150 155 160

Arg Glu Gly Ser Ala Arg Tyr Ala Phe Ser Phe Ala Gly Ala Gln Glu
 165 170 175

Ala Cys Ala Arg Ile Gly Ala Arg Ile Ala Thr Pro Glu Gln Leu Tyr
 180 185 190

Ala Ala Tyr Leu Gly Gly Tyr Glu Gln Cys Asp Ala Gly Trp Leu Ser

195		200		205
Asp Gln Thr Val Arg Tyr Pro Ile Gln Asn Pro Arg Glu Ala Cys Ser				
210		215		220
Gly Asp Met Asp Gly Tyr Pro Gly Val Arg Asn Tyr Gly Val Val Gly				
225		230		235
Pro Asp Asp Leu Tyr Asp Val Tyr Cys Tyr Ala Glu Asp Leu Asn Gly				
	245		250	255
Glu Leu Phe Leu Gly Ala Pro Pro Ser Lys Leu Thr Trp Glu Glu Ala				
	260		265	270
Arg Asp Tyr Cys Leu Glu Arg Gly Ala Gln Ile Ala Ser Thr Gly Gln				
	275		280	285
Leu Tyr Ala Ala Trp Asn Gly Gly Leu Asp Arg Cys Ser Pro Gly Trp				
	290		295	300
Leu Ala Asp Gly Ser Val Arg Tyr Pro Ile Ile Thr Pro Ser Gln Arg				
305		310		315
Cys Gly Gly Gly Leu Pro Gly Val Lys Thr Leu Phe Leu Phe Pro Asn				
	325		330	335
Gln Thr Gly Phe Pro Ser Lys Gln Asn Arg Phe Asn Val Tyr Cys Phe				
	340		345	350
Arg Asp Ser Ala His Pro Ser Ala Ser Ser Glu Ala Ser Ser Pro Ala				
	355		360	365
Ser Asp Gly Leu Glu Ala Ile Val Thr Val Thr Glu Lys Leu Glu Glu				
	370		375	380
Leu Gln Leu Pro Gln Glu Ala Met Glu Ser Glu Ser Arg Gly Ala Ile				
385		390		395
Tyr Ser Ile Pro Ile Ser Glu Asp Gly Gly Gly Gly Ser Ser Thr Pro				
	405		410	415
Glu Asp Pro Ala Glu Ala Pro Arg Thr Pro Leu Glu Ser Glu Thr Gln				
	420		425	430
Ser Ile Ala Pro Pro Thr Glu Ser Ser Glu Glu Glu Gly Val Ala Leu				
	435		440	445
Glu Glu Glu Glu Arg Phe Lys Asp Leu Glu Ala Leu Glu Glu Glu Lys				

450		455		460
Glu Gln Glu Asp Leu Trp Val Trp Pro Arg Glu Leu Ser Ser Pro Leu				
465		470		475 480
Pro Thr Gly Ser Glu Thr Glu His Ser Leu Ser Gln Val Ser Pro Pro				
	485		490	495
Ala Gln Ala Val Leu Gln Leu Asp Ala Ser Pro Ser Pro Gly Pro Pro				
	500		505	510
Arg Phe Arg Gly Pro Pro Ala Glu Thr Leu Leu Pro Pro Arg Glu Trp				
	515		520	525
Ser Ala Thr Ser Thr Pro Gly Gly Ala Arg Glu Val Gly Gly Glu Thr				
	530		535	540
Gly Ser Pro Glu Leu Ser Gly Val Pro Arg Glu Ser Glu Glu Ala Gly				
	545		550	555 560
Ser Ser Ser Leu Glu Asp Gly Pro Ser Leu Leu Pro Ala Thr Trp Ala				
	565		570	575
Pro Val Gly Pro Arg Glu Leu Glu Thr Pro Ser Glu Glu Lys Ser Gly				
	580		585	590
Arg Thr Val Leu Ala Gly Thr Ser Val Gln Ala Gln Pro Val Leu Pro				
	595		600	605
Thr Asp Ser Ala Ser His Gly Gly Val Ala Val Ala Pro Ser Ser Gly				
	610		615	620
Asp Cys Ile Pro Ser Pro Cys His Asn Gly Gly Thr Cys Leu Glu Glu				
	625		630	635 640
Lys Glu Gly Phe Arg Cys Leu Cys Leu Pro Gly Tyr Gly Gly Asp Leu				
	645		650	655
Cys Asp Val Gly Leu His Phe Cys Ser Pro Gly Trp Glu Ala Phe Gln				
	660		665	670
Gly Ala Cys Tyr Lys His Phe Ser Thr Arg Arg Ser Trp Glu Glu Ala				
	675		680	685
Glu Ser Gln Cys Arg Ala Leu Gly Ala His Leu Thr Ser Ile Cys Thr				
	690		695	700
Pro Glu Glu Gln Asp Phe Val Asn Asp Arg Tyr Arg Glu Tyr Gln Trp				

705		710		715		720
Ile Gly Leu Asn Asp Arg Thr Ile Glu Gly Asp Phe Leu Trp Ser Asp						
	725		730		735	
Gly Ala Pro Leu Leu Tyr Glu Asn Trp Asn Pro Gly Gln Pro Asp Ser						
	740		745		750	
Tyr Phe Leu Ser Gly Glu Asn Cys Val Val Met Val Trp His Asp Gln						
	755		760		765	
Gly Gln Trp Ser Asp Val Pro Cys Asn Tyr His Leu Ser Tyr Thr Cys						
	770		775		780	
Lys Met Gly Leu Val Ser Cys Gly Pro Pro Pro Gln Leu Pro Leu Ala						
	785		790		795	800
Gln Ile Phe Gly Arg Pro Arg Leu Arg Tyr Ala Val Asp Thr Val Leu						
	805		810		815	
Arg Tyr Arg Cys Arg Asp Gly Leu Ala Gln Arg Asn Leu Pro Leu Ile						
	820		825		830	
Arg Cys Gln Glu Asn Gly Leu Trp Glu Ala Pro Gln Ile Ser Cys Val						
	835		840		845	
Pro Arg Arg Pro Gly Arg Ala Leu Arg Ser Met Asp Ala Pro Glu Gly						
	850		855		860	
Pro Arg Gly Gln Leu Ser Arg His Arg Lys Ala Pro Leu Thr Pro Pro						
	865		870		875	880
Ser Ser Leu						

<210> 73
 <211> 3153
 <212> DNA
 <213> Mus sp.

<400> 73
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 acctcgcaag ttcttccatc agtgtgcaga atgataccac tgcttctgtc cctgctggcc 180
 gctctggtcc tgacccaagc cctgcccgc ctcgctgatg acctgaaaga agacagctcg 240
 gaggatcgag ccttccgcgt gcgcacgggt gccgcgcagc tgcggggcgt gctgggcggt 300
 gccctggcca tccatgcca cgtccaccac ctgcggccgc cgcgagccg ccgggccgcg 360

ccgggttttc	cccgggtcaa	gtggaccttc	ctgtccgggg	accgggaggt	agaggttctg	420
gtggctcgcg	ggctgcgcgt	caaggtaaac	gaagcctacc	ggttccgcgt	ggcgctgcct	480
gcctaccccg	catcgctcac	ggatgtgtct	ctagtattga	gcgaactgcg	gccaatgat	540
tccgggtct	atcgctgcga	ggccagcac	ggtatcgacg	acagcagtga	tgctgtggag	600
gtcaagggtca	aaggggtcgt	cttctctac	agagagggct	ctgcgcgcta	tgctttctcc	660
ttcgctggag	cccaggaagc	ctgcgctcgc	ataggagccc	gaatcgccac	cccggagcag	720
ctctatgctg	cctacctcgg	cggctatgag	cagtgtgatg	caggctggct	gtccgaccaa	780
actgtgaggt	accccatcca	gaaccacga	gaggcctgct	ctggagacat	ggatggctat	840
cctggcgtag	ggaactacgg	agtgggtggg	cctgatgatc	tctatgatgt	ctactgttat	900
gccgaagacc	taaatggaga	actgttccta	ggcgccctc	ccagcaagct	gacatgggag	960
gaggctcggg	actactgtct	ggaacgtggg	gcacagatcg	ctagcacagg	ccagctgtac	1020
gcagcctgga	atgggtggcct	ggacagatgt	agccctggct	ggctggctga	tggcagcgtg	1080
cgtatccca	tcatcacacc	cagccaacgc	tgtggggggc	gcctgccagg	agtcaagacc	1140
ctcttctct	ttcccaacca	gactggcttc	cccagcaagc	agaaccgctt	caatgtctac	1200
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ggacttgagg	ccattgtcac	agtgcagaa	aagctggagg	aactgcagct	gcctcaggaa	1320
gcgatggaga	gcgagtctcg	tggggccatc	tactccatcc	ccatctcaga	agatggggga	1380
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tgggtggctc	cgccccctca	cacaagggcc	tcaggtttta	cccggtaagt	ccctaagtgc	3000
ctcaactgcc	ctctcatgtc	agctgcctcc	ttgtccctcg	atntcgtnag	gggacactgt	3060
gctattcgat	cttgattgtc	gaagagtttt	taggatggag	taccagcaaa	accagggtga	3120
aataaagttg	tctgaaccca	aagaaaaaaa	aaa			3153

<210> 74
<400> 74
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<210> 75
<400> 75
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<210> 76
<400> 76
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<210> 77
<400> 77
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<210> 78
<400> 78
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<210> 79
<400> 79
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<210> 80
<400> 80
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<210> 81
<211> 2002
<212> DNA
<213> Gerbil

<400> 81
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agaaggagtc tttgcatcaa aaaaagcagc aagcatcttt atgcaccgtc gcctcctata 240
caatagattt gatttagaac tcttcactcc cggaacctg gagagagagt gctatgagga 300
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ctggcgggaa	tattcagtca	aaggaccaac	cacaagatca	gatgtcaaca	aagagaaaat	420
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cttacttggg	tactatctgt	gtatcaccaa	gtgtaatagg	cagccatata	aaggttcttc	540
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aacattcttg	ctacagctag	gtacctataa	tccccacctt	caggagactt	aggcgggagg	1080
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cacatttgaa	acaaataaca	agaaaaacaa	acaaaaaac	caaaacaaac	aaaatcttga	1740
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taaaccagc	acttgagagc	caaaggcagg	cagagctcag	tgagttggag	accagcctgg	1920
tctacaaagc	aagttctaag	ggagccaggg	cacagagaaa	ccctgtctga	aggaaaaaaa	1980
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<210> 82

<211> 675

<212> DNA

<213> Gerbil

<400> 82

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gcaagcatct	ttatgcaccg	tcgcctccta	tacaatagat	ttgatttaga	actcttcaact	180
cccggaacc	tggagagaga	gtgctatgag	gagttctgta	gttatgaaga	agccagagag	240
atcctcgggg	acaacgaaga	aatgatcaca	ttctggcggg	aatattcagt	caaaggacca	300
accacaagat	cagatgtcaa	caaagagaaa	attgatgtta	tgggccttct	gactggctta	360
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acaccgtcca	tcattttcag	aacctatgag	gaagctgtct	tgtctccatc	gtcatcctca	540
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<210> 83
<211> 225
<212> PRT
<213> Gerbil

<400> 83

Met Phe Leu Leu Leu Val Val Leu Ser Gln Leu Pro Arg Leu Thr Leu
1 5 10 15

Ala Val Pro His Thr Arg Ser Leu Lys Asn Ser Glu His Ala Pro Glu
20 25 30

Gly Val Phe Ala Ser Lys Lys Ala Ala Ser Ile Phe Met His Arg Arg
35 40 45

Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn Leu
50 55 60

Glu Arg Glu Cys Tyr Glu Glu Phe Cys Ser Tyr Glu Glu Ala Arg Glu
65 70 75 80

Ile Leu Gly Asp Asn Glu Glu Met Ile Thr Phe Trp Arg Glu Tyr Ser
85 90 95

Val Lys Gly Pro Thr Thr Arg Ser Asp Val Asn Lys Glu Lys Ile Asp
100 105 110

Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu Val
115 120 125

Val Phe Gly Leu Leu Gly Tyr Tyr Leu Cys Ile Thr Lys Cys Asn Arg
130 135 140

Gln Pro Tyr Gln Gly Ser Ser Ala Val Tyr Thr Arg Arg Thr Arg His
145 150 155 160

Thr Pro Ser Ile Ile Phe Arg Thr His Glu Glu Ala Val Leu Ser Pro
165 170 175

Ser Ser Ser Ser Glu Asp Ala Gly Leu Pro Ser Tyr Glu Gln Ala Val
180 185 190

Ala Leu Thr Arg Lys His Ser Val Ser Pro Pro Pro Pro Tyr Pro Gly
195 200 205

Pro Ala Lys Gly Phe Arg Val Phe Lys Lys Ser Met Ser Leu Pro Ser

210

215

220

His

225

<210> 84

<211> 17

<212> PRT

<213> Gerbil

<400> 84

Met Phe Leu Leu Leu Val Val Leu Ser Gln Leu Pro Arg Leu Thr Leu
 1 5 10 15

Ala

<210> 85

<211> 208

<212> PRT

<213> Gerbil

<400> 85

Val Pro His Thr Arg Ser Leu Lys Asn Ser Glu His Ala Pro Glu Gly
 1 5 10 15

Val Phe Ala Ser Lys Lys Ala Ala Ser Ile Phe Met His Arg Arg Leu
 20 25 30

Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn Leu Glu
 35 40 45

Arg Glu Cys Tyr Glu Glu Phe Cys Ser Tyr Glu Glu Ala Arg Glu Ile
 50 55 60

Leu Gly Asp Asn Glu Glu Met Ile Thr Phe Trp Arg Glu Tyr Ser Val
 65 70 75 80

Lys Gly Pro Thr Thr Arg Ser Asp Val Asn Lys Glu Lys Ile Asp Val
 85 90 95

Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu Val Val
 100 105 110

Phe Gly Leu Leu Gly Tyr Tyr Leu Cys Ile Thr Lys Cys Asn Arg Gln
 115 120 125

Pro Tyr Gln Gly Ser Ser Ala Val Tyr Thr Arg Arg Thr Arg His Thr
 130 135 140

Pro Ser Ile Ile Phe Arg Thr His Glu Glu Ala Val Leu Ser Pro Ser
 145 150 155 160

Ser Ser Ser Glu Asp Ala Gly Leu Pro Ser Tyr Glu Gln Ala Val Ala
 165 170 175

Leu Thr Arg Lys His Ser Val Ser Pro Pro Pro Pro Tyr Pro Gly Pro
 180 185 190

Ala Lys Gly Phe Arg Val Phe Lys Lys Ser Met Ser Leu Pro Ser His
 195 200 205

<210> 86
 <211> 95
 <212> PRT
 <213> Gerbil

<400> 86
 Val Pro His Thr Arg Ser Leu Lys Asn Ser Glu His Ala Pro Glu Gly
 1 5 10 15

Val Phe Ala Ser Lys Lys Ala Ala Ser Ile Phe Met His Arg Arg Leu
 20 25 30

Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn Leu Glu
 35 40 45

Arg Glu Cys Tyr Glu Glu Phe Cys Ser Tyr Glu Glu Ala Arg Glu Ile
 50 55 60

Leu Gly Asp Asn Glu Glu Met Ile Thr Phe Trp Arg Glu Tyr Ser Val
 65 70 75 80

Lys Gly Pro Thr Thr Arg Ser Asp Val Asn Lys Glu Lys Ile Asp
 85 90 95

<210> 87
 <211> 25
 <212> PRT

<213> Gerbil

<400> 87

Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu Val
1 5 10 15

Val Phe Gly Leu Leu Gly Tyr Tyr Leu
20 25

<210> 88

<211> 88

<212> PRT

<213> Gerbil

<400> 88

Cys Ile Thr Lys Cys Asn Arg Gln Pro Tyr Gln Gly Ser Ser Ala Val
1 5 10 15

Tyr Thr Arg Arg Thr Arg His Thr Pro Ser Ile Ile Phe Arg Thr His
20 25 30

Glu Glu Ala Val Leu Ser Pro Ser Ser Ser Ser Glu Asp Ala Gly Leu
35 40 45

Pro Ser Tyr Glu Gln Ala Val Ala Leu Thr Arg Lys His Ser Val Ser
50 55 60

Pro Pro Pro Pro Tyr Pro Gly Pro Ala Lys Gly Phe Arg Val Phe Lys
65 70 75 80

Lys Ser Met Ser Leu Pro Ser His
85

<210> 89

<400> 89

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<210> 90

<400> 90

000

<210> 91

<400> 91

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<210> 92
 <211> 962
 <212> DNA
 <213> Mus sp.

<400> 92
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 tcctccaact ggctgaaaca tatctccatc cctgagttgg ctgcactgcc aacttatctc 120
 aagaacaggc tctacctgca caacaacccg ctgccctgtg actgcagcct ctaccacctg 180
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 tgcttgggtct ttaaggtgtc agagtcccgag gtgcgctttt ttgagcacag ccgggtcttc 300
 aagaactgct ctgtggctgc agctccaggc ttagagctgc ctgaagagca gctgcacgcg 360
 caggtgggcc agtccctgag gctcttctgc aacaccagtg tgccctgccac tcgggtggcc 420
 tgggtctccc cgaagaatga gctgcttgtg gcgccagcct ctcaggatgg tagcatcgct 480
 gtgttggctg atggcagctt agccataggc aggggtgcaag agcagcacgc aggcgtcttt 540
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 gtgcaaaagg ctgccccga gccagagact ttcaacacag gctttaccac cctgctgggc 660
 tgtattgtgg gcctggtgct ggtgtgtgct tacttgtttg caccaccctg tcgtggctgc 720
 tgtcactgct gtcagcgggc ctgccgcaac cgttgcctgg cccgggcatc cagtccactc 780
 caggagctga gcgcacagtc ctccatgctt agcactacgc caccagatgc accagccgc 840
 aaggccagtg tccacaagca tgtgtgtctc ctggagccgg gcaagaaggc cctcaatggc 900
 cgtgtgcagc tcgcagtacc tccagactcc gatctgtgca accccatggg cttgcaactc 960
 aa 962

<210> 93
 <211> 320
 <212> PRT
 <213> Mus sp.

<400> 93
 Pro Phe Leu Phe Asn His Leu His Gly Leu Gly Leu Thr Arg Leu Arg
 1 5 10 15
 Thr Leu Asp Leu Ser Ser Asn Trp Leu Lys His Ile Ser Ile Pro Glu
 20 25 30
 Leu Ala Ala Leu Pro Thr Tyr Leu Lys Asn Arg Leu Tyr Leu His Asn
 35 40 45
 Asn Pro Leu Pro Cys Asp Cys Ser Leu Tyr His Leu Leu Arg Arg Trp
 50 55 60
 His Gln Arg Gly Leu Ser Ala Leu His Asp Phe Glu Arg Glu Tyr Thr
 65 70 75 80

Cys	Leu	Val	Phe	Lys	Val	Ser	Glu	Ser	Arg	Val	Arg	Phe	Phe	Glu	His	85	90	95	
Ser	Arg	Val	Phe	Lys	Asn	Cys	Ser	Val	Ala	Ala	Ala	Pro	Gly	Leu	Glu	100	105	110	
Leu	Pro	Glu	Glu	Gln	Leu	His	Ala	Gln	Val	Gly	Gln	Ser	Leu	Arg	Leu	115	120	125	
Phe	Cys	Asn	Thr	Ser	Val	Pro	Ala	Thr	Arg	Val	Ala	Trp	Val	Ser	Pro	130	135	140	
Lys	Asn	Glu	Leu	Leu	Val	Ala	Pro	Ala	Ser	Gln	Asp	Gly	Ser	Ile	Ala	145	150	155	160
Val	Leu	Ala	Asp	Gly	Ser	Leu	Ala	Ile	Gly	Arg	Val	Gln	Glu	Gln	His	165	170	175	
Ala	Gly	Val	Phe	Val	Cys	Leu	Ala	Ser	Gly	Pro	Arg	Leu	His	His	Asn	180	185	190	
Gln	Thr	Leu	Glu	Tyr	Asn	Val	Ser	Val	Gln	Lys	Ala	Arg	Pro	Glu	Pro	195	200	205	
Glu	Thr	Phe	Asn	Thr	Gly	Phe	Thr	Thr	Leu	Leu	Gly	Cys	Ile	Val	Gly	210	215	220	
Leu	Val	Leu	Val	Leu	Leu	Tyr	Leu	Phe	Ala	Pro	Pro	Cys	Arg	Gly	Cys	225	230	235	240
Cys	His	Cys	Cys	Gln	Arg	Ala	Cys	Arg	Asn	Arg	Cys	Trp	Pro	Arg	Ala	245	250	255	
Ser	Ser	Pro	Leu	Gln	Glu	Leu	Ser	Ala	Gln	Ser	Ser	Met	Leu	Ser	Thr	260	265	270	
Thr	Pro	Pro	Asp	Ala	Pro	Ser	Arg	Lys	Ala	Ser	Val	His	Lys	His	Val	275	280	285	
Val	Phe	Leu	Glu	Pro	Gly	Lys	Lys	Gly	Leu	Asn	Gly	Arg	Val	Gln	Leu	290	295	300	
Ala	Val	Pro	Pro	Asp	Ser	Asp	Leu	Cys	Asn	Pro	Met	Gly	Leu	Gln	Leu	305	310	315	320

<210> 94
<211> 16
<212> PRT
<213> Mus sp.

<400> 94
Pro Phe Leu Phe Asn His Leu His Gly Leu Gly Leu Thr Arg Leu Arg
1 5 10 15

<210> 95
<211> 304
<212> PRT
<213> Mus sp.

<400> 95
Thr Leu Asp Leu Ser Ser Asn Trp Leu Lys His Ile Ser Ile Pro Glu
1 5 10 15

Leu Ala Ala Leu Pro Thr Tyr Leu Lys Asn Arg Leu Tyr Leu His Asn
20 25 30

Asn Pro Leu Pro Cys Asp Cys Ser Leu Tyr His Leu Leu Arg Arg Trp
35 40 45

His Gln Arg Gly Leu Ser Ala Leu His Asp Phe Glu Arg Glu Tyr Thr
50 55 60

Cys Leu Val Phe Lys Val Ser Glu Ser Arg Val Arg Phe Phe Glu His
65 70 75 80

Ser Arg Val Phe Lys Asn Cys Ser Val Ala Ala Ala Pro Gly Leu Glu
85 90 95

Leu Pro Glu Glu Gln Leu His Ala Gln Val Gly Gln Ser Leu Arg Leu
100 105 110

Phe Cys Asn Thr Ser Val Pro Ala Thr Arg Val Ala Trp Val Ser Pro
115 120 125

Lys Asn Glu Leu Leu Val Ala Pro Ala Ser Gln Asp Gly Ser Ile Ala
130 135 140

Val Leu Ala Asp Gly Ser Leu Ala Ile Gly Arg Val Gln Glu Gln His
145 150 155 160

Ala Gly Val Phe Val Cys Leu Ala Ser Gly Pro Arg Leu His His Asn

165

170

175

Gln Thr Leu Glu Tyr Asn Val Ser Val Gln Lys Ala Arg Pro Glu Pro
180 185 190

Glu Thr Phe Asn Thr Gly Phe Thr Thr Leu Leu Gly Cys Ile Val Gly
195 200 205

Leu Val Leu Val Leu Leu Tyr Leu Phe Ala Pro Pro Cys Arg Gly Cys
210 215 220

Cys His Cys Cys Gln Arg Ala Cys Arg Asn Arg Cys Trp Pro Arg Ala
225 230 235 240

Ser Ser Pro Leu Gln Glu Leu Ser Ala Gln Ser Ser Met Leu Ser Thr
245 250 255

Thr Pro Pro Asp Ala Pro Ser Arg Lys Ala Ser Val His Lys His Val
260 265 270

Val Phe Leu Glu Pro Gly Lys Lys Gly Leu Asn Gly Arg Val Gln Leu
275 280 285

Ala Val Pro Pro Asp Ser Asp Leu Cys Asn Pro Met Gly Leu Gln Leu
290 295 300

<210> 96

<211> 197

<212> PRT

<213> Mus sp.

<400> 96

Thr Leu Asp Leu Ser Ser Asn Trp Leu Lys His Ile Ser Ile Pro Glu
1 5 10 15

Leu Ala Ala Leu Pro Thr Tyr Leu Lys Asn Arg Leu Tyr Leu His Asn
20 25 30

Asn Pro Leu Pro Cys Asp Cys Ser Leu Tyr His Leu Leu Arg Arg Trp
35 40 45

His Gln Arg Gly Leu Ser Ala Leu His Asp Phe Glu Arg Glu Tyr Thr
50 55 60

Cys Leu Val Phe Lys Val Ser Glu Ser Arg Val Arg Phe Phe Glu His
65 70 75 80

Ser Arg Val Phe Lys Asn Cys Ser Val Ala Ala Ala Pro Gly Leu Glu
85 90 95

Leu Pro Glu Glu Gln Leu His Ala Gln Val Gly Gln Ser Leu Arg Leu
100 105 110

Phe Cys Asn Thr Ser Val Pro Ala Thr Arg Val Ala Trp Val Ser Pro
115 120 125

Lys Asn Glu Leu Leu Val Ala Pro Ala Ser Gln Asp Gly Ser Ile Ala
130 135 140

Val Leu Ala Asp Gly Ser Leu Ala Ile Gly Arg Val Gln Glu Gln His
145 150 155 160

Ala Gly Val Phe Val Cys Leu Ala Ser Gly Pro Arg Leu His His Asn
165 170 175

Gln Thr Leu Glu Tyr Asn Val Ser Val Gln Lys Ala Arg Pro Glu Pro
180 185 190

Glu Thr Phe Asn Thr
195

<210> 97

<211> 20

<212> PRT

<213> Mus sp.

<400> 97

Gly Phe Thr Thr Leu Leu Gly Cys Ile Val Gly Leu Val Leu Val Leu
1 5 10 15

Leu Tyr Leu Phe
20

<210> 98

<211> 87

<212> PRT

<213> Mus sp.

<400> 98

Ala Pro Pro Cys Arg Gly Cys Cys His Cys Cys Gln Arg Ala Cys Arg

1 5 10 15
 Asn Arg Cys Trp Pro Arg Ala Ser Ser Pro Leu Gln Glu Leu Ser Ala
 20 25 30
 Gln Ser Ser Met Leu Ser Thr Thr Pro Pro Asp Ala Pro Ser Arg Lys
 35 40 45
 Ala Ser Val His Lys His Val Val Phe Leu Glu Pro Gly Lys Lys Gly
 50 55 60
 Leu Asn Gly Arg Val Gln Leu Ala Val Pro Pro Asp Ser Asp Leu Cys
 65 70 75 80
 Asn Pro Met Gly Leu Gln Leu
 85

<210> 99
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: TANGO 331
 human radiation panel forward primer

<400> 99
 attattcaga aggatgtccc gtgg 24

<210> 100
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: TANGO 331
 human radiation panel reverse primer

<400> 100
 cctcctgatt acctacaatg gtc 23